

# WEST Search History

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DATE: Monday, January 08, 2007

Hide?	Set Name	Query	Hit Count
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L1	6648327.pn.	1
<input type="checkbox"/>	L2	6348327.pn.	1
<input type="checkbox"/>	L3	prorelaxin	213
<input type="checkbox"/>	L4	dibasic cleavage	84
<input type="checkbox"/>	L5	l3 and l4	1
<input type="checkbox"/>	L6	relaxin	701
<input type="checkbox"/>	L7	L3 AND L6	206
<input type="checkbox"/>	L8	KEX2	792
<input type="checkbox"/>	L9	PROHORMONE CONVERTASE	144
<input type="checkbox"/>	L10	L7 AND L8	3
<input type="checkbox"/>	L11	L9 AND L7	2
<input type="checkbox"/>	L12	L10 OR L11	3
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L13	GORMAN.IN.	2579
<input type="checkbox"/>	L14	GROSKREUTZ.IN.	34
<input type="checkbox"/>	L15	L14 AND L13	8
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L16	L8 AND CHO	535
<input type="checkbox"/>	L17	L9 AND CHO	71
<input type="checkbox"/>	L18	KIDNEY AND 293	11032
<input type="checkbox"/>	L19	L18 AND L8	212
<input type="checkbox"/>	L20	L19 AND L9	16
<input type="checkbox"/>	L21	L7 AND CHO	147
<input type="checkbox"/>	L22	L21 AND HEK	9

END OF SEARCH HISTORY

> D HIS

(FILE 'HOME' ENTERED AT 18:23:30 ON 08 JAN 2007)

FILE 'MEDLINE' ENTERED AT 18:23:48 ON 08 JAN 2007

L1 33 S PREPRORELAXIN  
L2 0 S PRERELAXIN  
L3 33 S PRORELAXIN

FILE 'CAPLUS, LIFESCI, SCISEARCH, EMBASE, BIOSIS, MEDLINE' ENTERED AT  
18:29:47 ON 08 JAN 2007

L4 228 S PRORELAXIN  
L5 107 DUPLICATE REMOVE L4 (121 DUPLICATES REMOVED)  
L6 6 S L4 AND PC1  
L7 7 S L4 AND KEX2  
L8 13 S L6 OR L7  
L9 17386 S PROINSULIN  
L10 239 S L9 AND PC1  
L11 16 S L10 AND KEX2  
L12 0 S L11 AND RELAXIN  
L13 0 S L11 AND PRORELAXIN  
L14 81 S L9 AND KEX2  
L15 0 S L14 AND HEK293  
L16 21983 S HEK293  
L17 0 S L10 AND HEK293  
L18 1 S L10 AND CHO  
L19 1 S L14 AND CHO  
L20 67 S TETRABASIC CLEAVAGE  
L21 0 S L4 AND L20  
L22 12 S L20 AND KEX2  
L23 8426 S L20 AND PC1 OR PC3  
L24 12966 S PC1 OR PC3  
L25 12 S L20 AND L24  
L26 23 S L22 OR L25  
L27 337 S SPC3  
L28 12966 S PC1 OR PC3  
L29 13206 S L27 OR L28  
L30 17 S L29 AND (RELAXIN OR PRORELAXIN)  
L31 6 DUPLICATE REMOVE L30 (11 DUPLICATES REMOVED)  
L32 10246 S RELAXIN OR PRORELAXIN  
L33 8 S L32 AND KEX2  
L34 3 DUPLICATE REMOVE L33 (5 DUPLICATES REMOVED)

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ANSWER 18 OF 33 MEDLINE on STN

AN 93188627 MEDLINE

DN PubMed ID: 8445994

TI Recombinant porcine prorelaxin produced in Chinese hamster ovary cells is biologically active.

AU Vu A L; Green C B; Roby K F; Soares M J; Fei D T; Chen A B; Kwok S C

CS Department of Biochemistry and Molecular Biology, University of Kansas Medical Center, Kansas City 66160.

NC HD24599 (NICHD)

SO Life sciences, (1993) Vol. 52, No. 12, pp. 1055-61.

Journal code: 0375521. ISSN: 0024-3205.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199304

ED Entered STN: 16 Apr 1993

Last Updated on STN: 3 Feb 1997

Entered Medline: 2 Apr 1993

AB Although prorelaxin has a similar structure as proinsulin, the posttranslational processing of prorelaxin seems to be quite different from that of proinsulin. There are no pairs of basic residues flanking the relaxin moiety in most prorelaxins studied so far. Instead, the prorelaxins of many species contains a tetrabasic sequence (Arg-Lys-Lys-Arg) between the connecting peptide and the A-chain. This is the recognition sequence of furin. In order to study this possible processing by furin, we express the recombinant porcine prorelaxin in Chinese hamster ovary cells. The expected 19 kDa recombinant porcine prorelaxin was found to be constitutively secreted into the medium at a level of approximately 250 ng/ml. No conversion of the 19 kDa prorelaxin into the 6 kDa relaxin was observed. Unlike most prohormones which are biologically inactive, the recombinant prorelaxin was found to be biologically active in an in vitro bioassay.

L3 ANSWER 19 OF 33 MEDLINE on STN

AN 93062911 MEDLINE

DN PubMed ID: 1435788

TI Prohormone convertase-1 will process prorelaxin, a member of the insulin family of hormones.

AU Marriott D; Gillece-Castro B; Gorman C M

CS Department of Cell Genetics, Genentech, Inc, South San Francisco, California 94080.

SO Molecular endocrinology (Baltimore, Md.), (1992 Sep) Vol. 6, No. 9, pp. 1441-50.

Journal code: 8801431. ISSN: 0888-8809.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199212

ED Entered STN: 22 Jan 1993

Last Updated on STN: 3 Mar 2000

Entered Medline: 21 Dec 1992

AB Relaxin is a polypeptide hormone involved in remodeling of the birth canal during parturition. It is synthesized as a preprohormone precursor, which undergoes specific processing to form the mature two-chain disulfide-linked active species that is secreted by the cell. A major part of this processing requires endoproteolytic cleavage at specific pairs of basic amino acid residues, an event necessary for the maturation of a variety of important biologically active proteins, such as insulin and nerve growth factor. Human type 2 preprorelaxin was coexpressed in human kidney 293 cells with the candidate prohormone convertase-processing enzymes mPC1 or mPC2, both cloned from the mouse pituitary tumor AtT-20

*obvious to try*

*no reasonable expectation of success*

cell line, or with the yeast kex2 alpha-mating factor-converting enzyme from *Saccharomyces cerevisiae*. Prorelaxin expressed alone in 293 cells was secreted into the culture medium unprocessed. Transient coexpression with mPC1 or kex2, but not with mPC2, resulted in the secretion of a low mol wt species with an electrophoretic mobility very similar, if not identical, to that of authentic mature relaxin purified from human placenta. This species was precipitable by monoclonal antibodies specific for relaxin and had a retention time on reverse phase HPLC comparable to that of relaxin. Its analysis by both electrospray and fast atom bombardment mass spectrometry generated mass data that were consistent only with mature relaxin. The basic residues required for mPC1-dependent cleavage of prorelaxin are defined by site-directed mutagenesis.

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AN 1990:30735 CAPLUS

DN 112:30735

TI Prohormonal cleavage sites are associated with  $\Omega$  loops

AU Bek, Eugene; Berry, Robert

CS Sch. Med., Northwestern Univ., Chicago, IL, 60611, USA

SO Biochemistry (1990), 29(1), 178-83

CODEN: BICHAW; ISSN: 0006-2960

DT Journal

LA English

AB Secretory peptides are generated from larger precursor proteins, or prohormones, by proteolytic cleavage at sites consisting of one or more basic amino acids. The association of these cleavage sites with the various classes of secondary structure in the prohormones was investigated. In particular the association of cleavage sites with the newly defined category of  $\Omega$  loops was determined. An algorithm for predicting the occurrence of such loops from the primary structure of the precursor was developed and this procedure was validated by comparison to crystallog. data. When this method was applied to prohormones, about one-third of the cleavage sites previously assigned to reverse turns were actually associated with  $\Omega$  loops. Moreover, sites that delimit secreted peptides are most often associated with loops and are concentrated in the neck regions of the loops.

These

data are interpreted in terms of a model in which the processing endoprotease interacts with two sites on the prohormone: a recognition site in the middle of a loop and the cleavage site at its neck.

*nothing*

ANSWER 82 OF 107 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on  
STN

AN 1992:88474 BIOSIS

DN PREV199242040749; BR42:40749

TI CORRECT PROCESSING OF HUMAN PRORELAXIN BY A MAMMALIAN PROHORMONE  
CONVERTASE MPC1 AND BY THE YEAST KEX2 GENE PRODUCT IN HUMAN KIDNEY 293  
CELLS.

AU MARRIOTT D [Reprint author]; GORMAN C M

CS DEP CELL GENET, GENENTECH INC, 460 PT SAN BRUNO BLVD, SO SAN FRANCISCO,  
CALIF 94080, USA

SO Journal of Cell Biology, (1991) Vol. 115, No. 3 PART 2, pp. 391A.  
Meeting Info.: ABSTRACTS OF PAPERS PRESENTED AT THE THIRTY-FIRST ANNUAL  
MEETING OF THE AMERICAN SOCIETY FOR CELL BIOLOGY, BOSTON, MASSACHUSETTS,  
USA, DECEMBER 8-12, 1991. J CELL BIOL.  
CODEN: JCLBA3. ISSN: 0021-9525.

DT Conference; (Meeting)

FS BR

LA ENGLISH

ED Entered STN: 4 Feb 1992

Last Updated on STN: 13 Mar 1992

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5,320,953 Hudson

L5 ANSWER 90 OF 107 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1988:449635 CAPLUS  
 DN 109:49635  
 TI Human prorelaxin, its recombinant preparation and therapeutic  
 use  
 IN Gorman, Cornelia Maxine; Ross, Michael Jay; Niall, Hugh David  
 PA Florey, Howard, Institute of Experimental Physiology and Medicine,  
 Australia; Genentech, Inc.  
 SO Eur. Pat. Appl., 57 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 260149	A1	19880316	EP 1987-308062	19870911
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	AU 8778314	A	19880317	AU 1987-78314	19870911
	AU 612594	B2	19910718		
	JP 63152399	A	19880624	JP 1987-229428	19870912
PRAI	US 1986-907197	A	19860912		

AB The first successful recombinant expression of the cDNA for human  
 prorelaxin (I) is reported. I is useful for effecting parturition  
 and treating connective tissue disorders (no data). The expression vector  
 pCIHRX contained H2 I cDNA under the control of the cytomegalovirus  
 enhancer, promoter, and splice donor site; the Ig variable region splice  
 acceptor site; and the hepatitis surface antigen polyadenylation site. I  
 was purified from the transformed CHO cell culture; the biol. activity of  
 I was tested using the murine pubic symphysis assay.

ANSWER 91 OF 107 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1988:401857 CAPLUS

DN 109:1857

TI Construction and use of plasmids for continuous heterologous protein manufacture in eukaryotic cells

IN Gorman, Cornelia Maxine

PA Genentech, Inc., USA

SO Eur. Pat. Appl., 48 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 260148	A2	19880316	EP 1987-308060	19870911
	EP 260148	A3	19890607		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	DK 8704739	A	19880313	DK 1987-4739	19870911
	DK 175363	B1	20040913		
	FR 2603899	A1	19880318	FR 1987-12633	19870911
	FR 2603899	B1	19900713		
	GB 2197321	A	19880518	GB 1987-21424	19870911
	GB 2197321	B	19901003		
	AU 8778317	A	19880519	AU 1987-78317	19870911
	AU 613316	B2	19910801		
	DE 3730599	A1	19880707	DE 1987-3730599	19870911
	JP 63152986	A	19880625	JP 1987-229429	19870912
	JP 2888518	B2	19990510		
	JP 09103296	A	19970422	JP 1996-118837	19870912
	JP 2000308497	A	20001107	JP 2000-115248	19870912
PRAI	US 1986-907185	A	19860912		
	US 1987-71674	A	19870709		
	JP 1987-229429	A3	19870912		
	JP 1996-118837	A3	19870912		
AB	Plasmids which allow continuous stable expression of heterologous protein genes in eukaryotic cells contain a stabilizing sequence comprising a splice donor-intron-acceptor sequence between the promoter and the gene. Plasmid pF8CIS, containing in 5' to 3' order a cytomegalovirus enhancer and promoter, a cytomegalovirus splice donor site and a portion of an intron, the Ig variable region intron and splice acceptor site, the Factor VIII-encoding cDNA, and the SV50 polyadenylation site, was constructed. Cotransfection of TM4 cells with this plasmid and a neomycin gene-containing plasmid, followed by amplification of the Factor VIII sequence, resulted in transformed cells which produced 3.0 milliunits Factor VIII/104 cells/day.				

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